

What is claimed is:

1. A laser display system having at least one laser as light source comprising:
 - at least one filter transmitting or reflecting a particular wavelength of red, green and blue light generated in the laser, and mixing the light red, green and blue light to one;
 - a rotation color separator separating the mixed light into the red, green and blue light sequentially;
 - a diffuser diffusing the separated light;
 - an illuminating device irradiating with the light progressed from the diffuser;
 - a display panel generating an image by modulating transmittance of the light from the illuminating device according to an electric signal of a video signal; and
 - a controller receiving the video signal, and making correspondence of color areas from the rotation color separator and the display panel.

2. The laser display system as claimed in claim 1, wherein at least one filter includes:
 - a first filter for mixing yellow light by transmitting the red light and reflecting the green light; and
 - a second filter transmitting the yellow light and reflecting the blue light.

3. The laser display system as claimed in claim 1, wherein at least one filter includes:
 - a first filter for mixing azure light by transmitting the green light and reflecting the blue light; and
 - a second filter transmitting the azure light and reflecting the red light.

4. The laser display system as claimed in claim 1, wherein the rotation color separator is divided into R, G and B areas for transmitting the red, green and blue colors, and the respective areas of red, green and blue are sequentially irradiated with the white light as the rotation color separator is rotated, whereby only the light of the corresponding area is transmitted.

5. The laser display system as claimed in claim 1, wherein the diffuser diffuses the red, green and blue light irregularly at different progressing angles.

6. The laser display system as claimed in claim 1, wherein the controller detects the color of the light transmitted in the rotation color separator, and transmits the signal of the corresponding color to the display panel by synchronizing with the detected color.

7. The laser display system as claimed in claim 1, wherein a color separation coating area is formed on the front of the rotation color separator, and a dispersing material coating area is formed on the rear thereof, and then the two area are rotated with a rotation axis, thereby integrating color separation and speckle prevention functions.

8. A laser display system having lasers generating red, green and blue light as light sources comprising:

a diffuser diffusing the light generated in the lasers;

an illuminating device irradiating with the diffused light;

a display panel generating an image by modulating transmittance of the light from the illuminating device according to an electric signal of a video signal; and

a controller sequentially turning on/off the lasers of the corresponding color after receiving the video signal and separating into red, green and blue signals.

9. The laser display system as claimed in claim 8, wherein the diffuser diffuses the red, green and blue light irregularly at different progressing angles.